

## Claims

1. Cup-shaped housing (1) for electrochemical cells, which have at least two electrodes (16, 17),

5           - having a lid (5) in which a first indentation (5B) for contacting a first electrode (16), directed inwards, is formed,

          - wherein a second indentation (10B) for contacting a second electrode (17) is formed in the housing bottom (10),

          - wherein the first and the second indentation (5B, 10B) have a cross-section that  
10 narrows into the interior of the housing.

2. Housing as recited in the preceding claim,

          - wherein the first and the second indentation extend in a straight line over the major portion of an expanse direction of the lid and the housing bottom.

15           3. Housing as recited in one of the preceding claims,

          - wherein the first and the second indentation are formed of a separate component in each instance.

20           4. Housing as recited in one of the preceding claims,

          - wherein the material of the housing and the lid comprises aluminum or aluminum forging alloys.

5. Housing as recited in one of the preceding claims,

- wherein an electrically insulating component (21) made in one piece is present,

which runs circumferentially around the edge of the lid (5) and is arranged in sealed

5 manner between the lid (5) and the wall of the housing (1), for a seal and for electrical insulation.

6. Housing as recited in one of the preceding claims,

- wherein first regions (21A) of the electrically insulating component (21) are

10 arranged circumferentially around the lid (5), outside of the housing interior, and have a notch (21c),

- wherein the edge (1A) of the housing is turned over towards the housing interior, circumferentially around the lid, so that the turned-over edge is arranged within the notch of the electrically insulating component.

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7. Housing as recited in one of the preceding claims 5 or 6,

- wherein the electrically insulating component comprises rubber.

8. Electrochemical cell configured as a capacitor, having a cup-shaped housing

20 (1) as recited in one of the preceding claims, having the characteristics,

- a layer stack that comprises the first (16) and the second electrode (17), which are formed as electrode layers, is accommodated in the housing in such a manner that the

faces of the layer stack lie opposite the lid (5) and the housing bottom (10),

- edge regions of either the first (16A) or the second electrode layer (17A), in each instance, project out of the faces of the layer stack, and are turned over at the contact points with the indentations (5B, 10B), to enlarge the contact area.

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9. Electrochemical cell configured as a capacitor, having a cup-shaped housing (1) as recited in one of the preceding claims, having the characteristics,

- a layer stack that comprises the first (16) and the second electrode (17), formed as alternating electrode layers, is accommodated in the housing in such a manner that the faces of the layer stack formed by the outer edges of the electrode layers lie opposite the lid (5) and the housing bottom (10),

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- edge regions of either the first (16A) or the second electrode layer (17A), in each instance, project out of the faces of the layer stack, and are turned over at the contact points with the indentations (5B, 10B), to enlarge the contact area,

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- second regions (21B) of the electrically insulating component (21) are present in the interior of the housing and are arranged between the wall of the housing and the turned-over edge regions of the first (16A) or the second electrode layer (17A), for electrical insulation.

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10. Capacitor as recited in the preceding claim,

- wherein the contact points between the indentations and the electrode layers are welded.

11. Capacitor as recited in the preceding claim,

- wherein the contact points are laser-welded.

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12. Capacitor as recited in one of claims 8 to 11,

- wherein the layer stack is rolled up into a capacitor winding.